B2320-1 1/19/83

Columbian Chemicals Company

January 6, 1982

Attached are charts and tables covering U.S.A. carbon black and dry rubber hydrocarbons through the first three quarters of 1982.

CARBON BLACK
(Excluding Thermal)

Furnace black production during the third quarter decreased 8% from the second quarter and 19% from the year earlier period to 243 thousand metric tons. Year-to-date output of 786 MMT was 17% below the first three quarters of 1981.

Although above the preceding quarter by 1%, shipments of 260 MMT in the third quarter were the lowest since the second quarter of 1967, down 18% from the year ago period. N-500 and N-700 were the lowest since the second quarter of 1967 and 1975 respectively. For the first nine months, shipments decreased 15% to 801 MMT. All grades were down, ranging from 9% in N-300 to over 23% in N-500 and N-700.

Plant inventory diminished from 106 to 89 MMT during the quarter, a one month supply.

DRY RUBBER HYDROCARBONS
(Excluding Reclaim)

Parallelling the furnace shipments, third quarter U.S.A. dry rubber hydrocarbon consumption also decreased to the lowest since the second quarter of 1967. Totaling 463 thousand metric tons, this was 11% below the second quarter and 21% below the third quarter of 1981. Since separate reporting of Butyl and Polyisoprene were discontinued in the third quarter, they were combined with the "other synthetic" on the attached chart. Nitrile was the lowest since the fourth quarter of 1971 and Natural, since the second quarter of 1967. For the first nine months, consumption decreased 15% from 1981 to 1,535 MMT. All polymers were down, ranging from 11% in Polybutadiene and EPDM to more than 20% in Polychloroprene and Nitrile.

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The synthetic ratio reverted from 74.9% to 74.5% for the first three quarters and the carbon-rubber ratio, from 52.5 phr to 50.8 parts per hundred rubber.

SBR black rubber production during the third quarter decreased 7% from the 1981 period to 67 MMT. Year-to-date output of 216 MMT decreased 11%, with carbon black, net polymer, and oil off 17%, 10% and 1% in that order. The oil loading rose from 38.4% a year ago to 42.2% and the net rubber used in black rubber increased its share of dry SBR from 22.1% to 24.6%.

Very truly yours,

Edward I. Bosworth

Edward I. Bosworth
Manager, Marketing

I. CARBON BLACK INDUSTRY IN THE U.S.A.
(Metric Tons)

			1982		Percentage Change	
			3rd Qtr.	9 Months	3rd Qtr. '82 vs. 3rd Qtr. '81	9 Months '82 vs. 9 Months '81
N-100	(SAF)	Prod.	3,656	12,817	-22.5%	-17.5%
		Ship.	4,578	12,943	-14.4%	-18.3%
N-200	(ISAF)	Prod.	25,389	80,664	-19.3%	-21.7%
		Ship.	27,517	82,685	-20.1%	-20.2%
N-300	(HAF)	Prod.	107,717	342,990	- 8.9%	-10.7%
		Ship.	113,279	347,925	-10.2%	- 9.3%
N-500	(FEF)	Prod.	21,658	75,143	-36.0%	-27.9%
		Ship.	24,358	79,582	-33.5%	-24.2%
N-600	(GPF)	Prod.	60,396	202,267	-22.4%	-14.2%
		Ship.	65,903	202,401	-18.4%	-13.0%
N-700	(SAF)	Prod.	23,871	71,667	-24.1%	-29.1%
		Ship.	24,228	75,527	-25.9%	-23.4%
Total		Prod.	242,687	785,548	-18.5%	-16.8%
		Ship.	259,863	801,063	-17.8%	-14.7%
Domestic Shipments (Included Above)			254,186	780,078	-17.5%	-13.6%
Domestic Share			97.8%	99.3%		

II. SBR BLACK RUBBER PRODUCTION
(Metric Tons)

	1982		Percentage Change	
	3rd Qtr.	9 Months	3rd Qtr. '82 vs. 3rd Qtr. '81	9 Months '82 vs. 9 Months '81
Net Polymer	31,545	105,560	- 8.1%	- 9.7%
Oil	13,143	44,535	- 1.1%	- 0.9%
Oil % Of Net Polymer	41.7%	42.2%		
Net Rubber	44,688	150,095	- 6.1%	- 7.3%
Net Rubber % of Dry SBR	23.2%	24.6%		
Carbon Black	21,894	66,207	- 7.9%	-17.0%
Total SBR Black Rubber	66,582	216,302	- 6.7%	-10.5%

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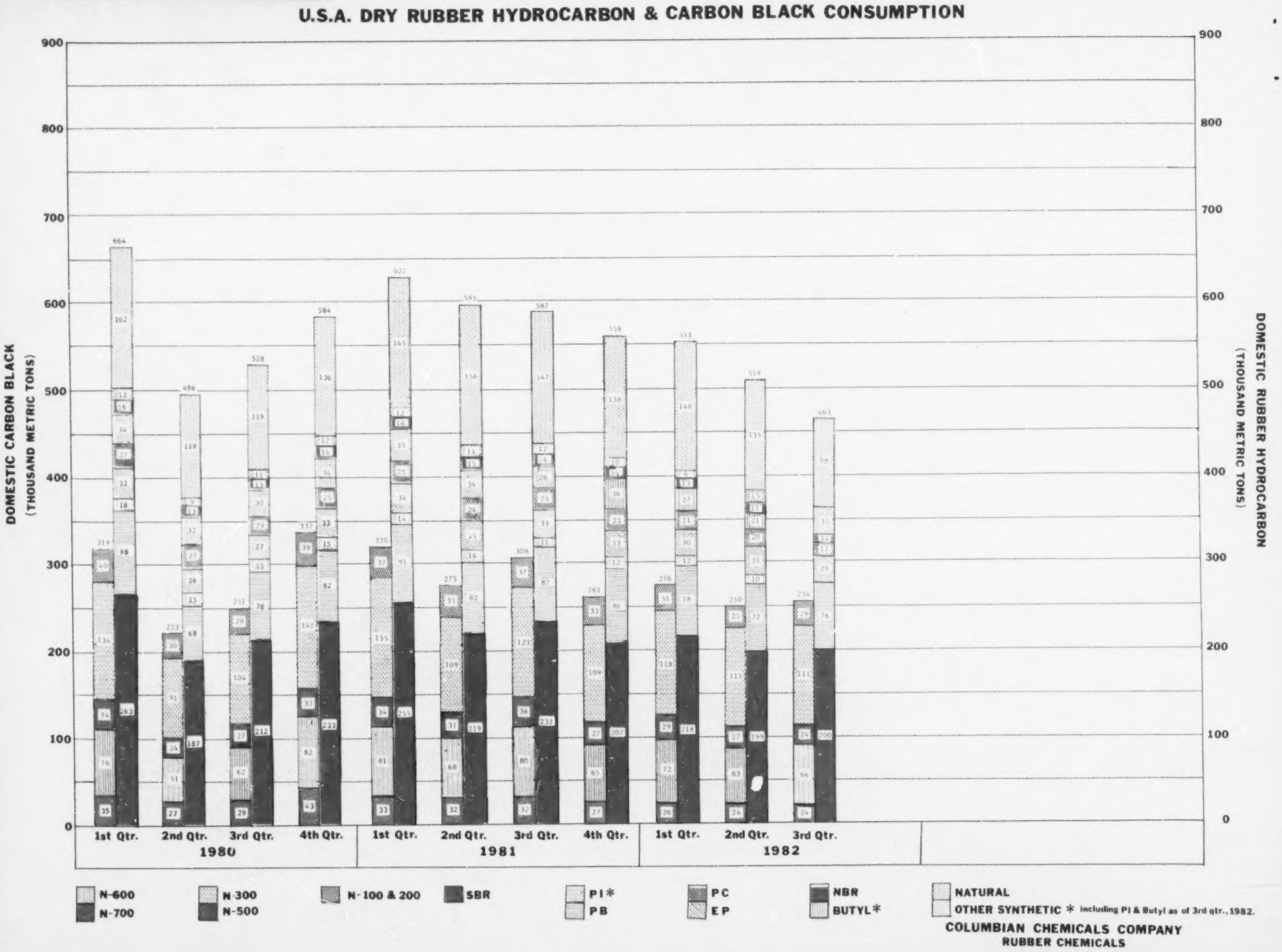

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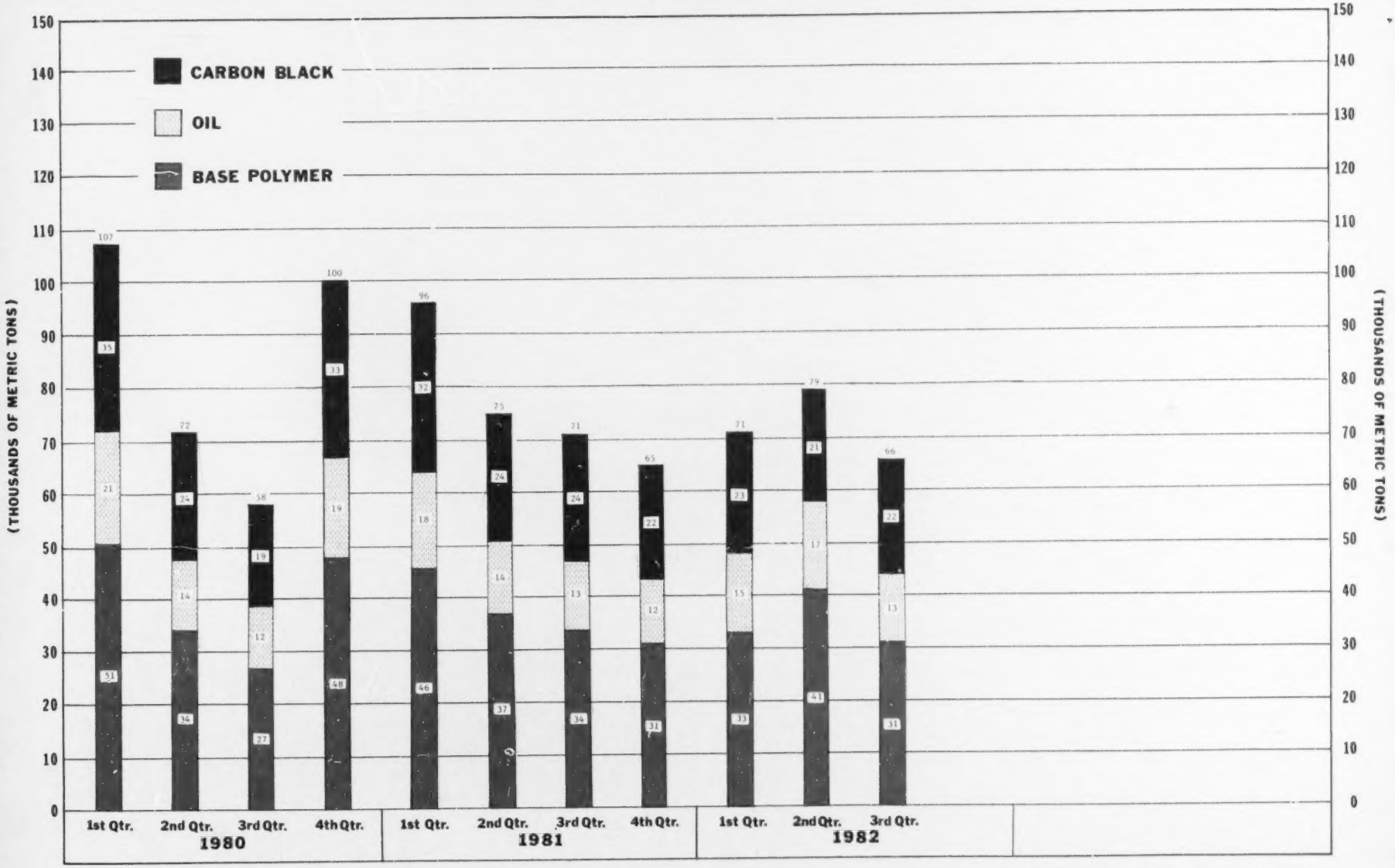
SBR BLACK RUBBER PRODUCTION



COLUMBIAN CHEMICALS COMPANY
RUBBER CHEMICALS

B2320-1 3/24/83

Columbian Chemicals Company

March 17, 1983

Attached are charts and tables covering U.S.A. carbon black and dry rubber hydrocarbon consumption during the year of 1982.

FURNACE BLACK

In 1982, U.S.A. furnace black production decreased 16% and shipments, 13% compared with 1981. Production and shipments totaled one million metric tons each, the lowest year since 1967. Reduced demand for all major grade classifications took place in 1982.

Fourth quarter production decreased 12% from the comparable period of 1981 to 259 MMT and shipments, 9% to 248 MMT.

Plant inventories decreased 5% during the year to 99 MMT, a five week supply, varying from four weeks in N-300 and N-500, to five weeks in N-200 and N-600 and eight weeks in N-100 and N-700.

DRY RUBBER HYDROCARBONS
(Excluding Reclaim)

1982 U.S.A. dry rubber hydrocarbon consumption, like furnace black, was the lowest since the year 1967. Totaling 2.1 million metric tons, it was 12% below 1981, with all polymers decreasing. SBR demand was a twenty-five year low.

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The synthetic ratio was reduced from 74.9% in 1981 to 72.9%, the lowest since 1961, and carbon rubber ratio eased from 49.2 to 49.0 pounds per hundred rubber.

SBR black rubber production declined 10% from the year before to 275 MMT, a twenty-three year low. Carbon black, net polymer and oil in SBR masterbatch were off 16%, 9% and 3% in that order. Although net rubber share of dry SBR output rose to a three-year high of 24.1%, carbon black used in black rubber parallelled production to the lowest in twenty-four years at 85 thousand metric tons.

Very truly yours,

Edward I. Bosworth

Edward I. Bosworth
Manager, Marketing

EIB:gs

I. U.S.A. CARBON BLACK INDUSTRY DATA

(Metric Tons)

		1982		Percentage Change	
		4th Qtr.	Year	4th Qtr. 82 vs. 4th Qtr. 81	Year 82 vs. Year 81
N-100 (SAF)	Prod.	4,070	16,887	(31.7%)	(21.4%)
	Ship.	3,951	16,894	(19.5%)	(18.6%)
N-200 (ISAF)	Prod.	28,680	109,344	(18.1%)	(20.8%)
	Ship.	28,734	111,419	(10.5%)	(17.9%)
N-300 (HAF)	Prod.	113,437	456,427	(5.4%)	(9.4%)
	Ship.	112,995	460,919	+ 0.7%	(7.0%)
N-500 (FEF)	Prod.	25,018	100,161	(22.5%)	(26.6%)
	Ship.	22,644	102,226	(18.9%)	(23.1%)
N-600 (GPF)	Prod.	62,274	264,541	(13.2%)	(14.0%)
	Ship.	58,099	260,501	(14.7%)	(13.4%)
N-700 (SRF)	Prod.	25,373	97,040	(14.2%)	(25.8%)
	Ship.	21,795	97,322	(18.9%)	(22.5%)
Total	Prod.	258,852	1,044,400	(12.1%)	(15.6%)
	Ship.	248,218	1,049,281	(8.8%)	(13.4%)
Domestic Shipments (Included Above)		242,562	1,022,640	(7.0%)	(12.1%)
Domestic Share		97.7%	97.5%		

II. SBR BLACK RUBBER PRODUCTION

(Metric Tons)

	1982		Percentage Change	
	4th Qtr.	Year	4th Qtr. 82 vs. 4th Qtr. 81	Year 82 vs. Year 81
Net Polymer	29,802	135,362	(5.2%)	(8.8%)
Oil	10,537	55,072	(12.9%)	(3.4%)
Oil % of Net Polymer	35.4%	40.7%		
Net Rubber	40,339	190,434	(7.4%)	(7.3%)
Net Rubber % of Dry SBR	22.5%	24.1%		
Carbon Black	18,514	84,721	(14.2%)	(16.4%)
Total SBR Black Rubber	58,853	275,155	(9.6%)	(10.3%)

III. U.S.A. CARBON RUBBER RATIO DATA
(Thousands of Metric Tons)

	A TOTAL NEW RUBBER CONSUMED	B DRY RUBBER HYDROCARBONS (Excl.Reclaim)	C DRY WEIGHT LATEX	D LATEX % OF TOTAL NEW RUBBER C/A X 100	E FURNACE CARBONS	F CARBON PHR E/B X 100	G SYNTHETIC RATIO
1955	1,554	1,384	170	11.0%	464	33.5	58.5%
6	1,460	1,301	159	10.9%	437	33.6	60.9%
7	1,488	1,322	166	11.1%*	472	35.7	63.2%
8	1,386	1,233	153	11.0%	454	36.8	64.5%
9	1,654	1,472	182	11.0%	552	37.5	65.9%
1960	1,583	1,420	164	10.3%	538	37.9	69.3%
1	1,554	1,395	159	10.2%	546	39.1	72.1%
2	1,746	1,575	171	9.8%	626	39.7	73.1%
3	1,792	1,618	174	9.7%	665	41.1	74.1%
4	1,964	1,774	190	9.7%	754	42.5	75.1%
1965	2,088	1,894	194	9.3%	811	42.8	75.0%
6	2,247	2,062	185	8.2%	896	43.5	75.3%
7	2,151	1,970	181	8.4%	873	44.3	76.9%
8	2,518	2,308	210	8.3%	1,029	44.6	76.5%
9	2,664	2,444	221	8.3%	1,108	45.3	77.2%
1970	2,517	2,313	204	8.1%	1,063	46.0	77.4%
1	2,714	2,506	208	7.6%	1,180	47.1	78.4%*
2	2,979	2,759	220	7.4%	1,317	47.7	78.2%
3	3,129	2,903	227	7.2%	1,401	48.3	77.7%
4	3,075	2,944	164	5.3%	1,329	45.1	76.6%
1975	2,692	2,538	154	5.7%	1,191	46.9	75.1%
6	2,906	2,676	230*	7.9%	1,281	47.9	74.9%
7	3,244*	3,035*	209	6.4%	1,467	48.3	76.0%
8	3,201	2,976	225	7.0%	1,502*	50.5*	76.1%
9	3,080	2,869	210	6.8%	1,426	49.7	76.0%
1980	2,440	2,272	168	6.9%	1,130	49.7	76.0%
1	2,524	2,366	158	6.3%	1,164	49.2	74.9%
2	2,242	2,087	155	6.9%	1,023	49.0	72.9%
1982 vs.'81	(11.2%)	(11.8%)	(1.9%)	+9.5%	(12.1%)	(0.4%)	(2.7%)

* = Record year.

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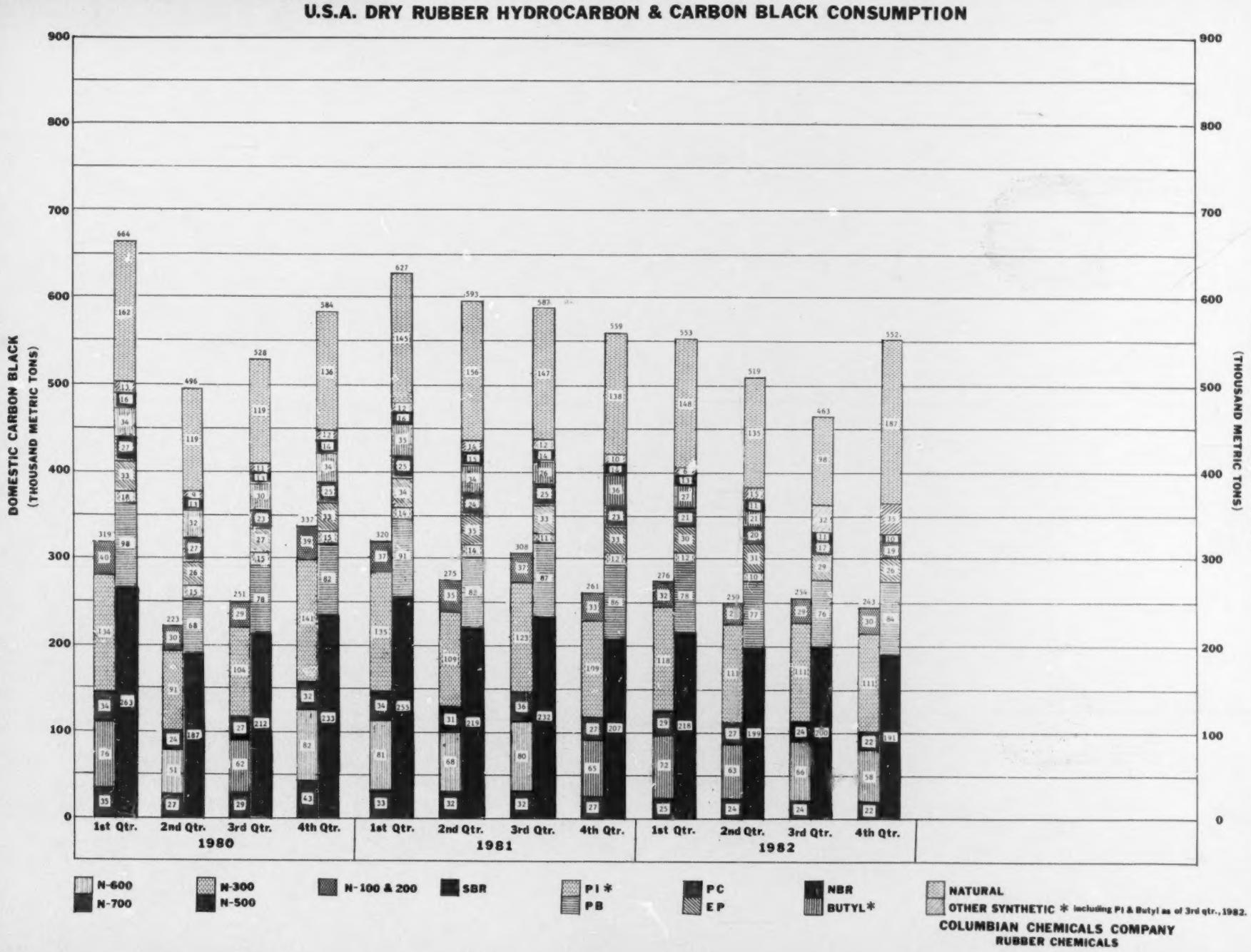
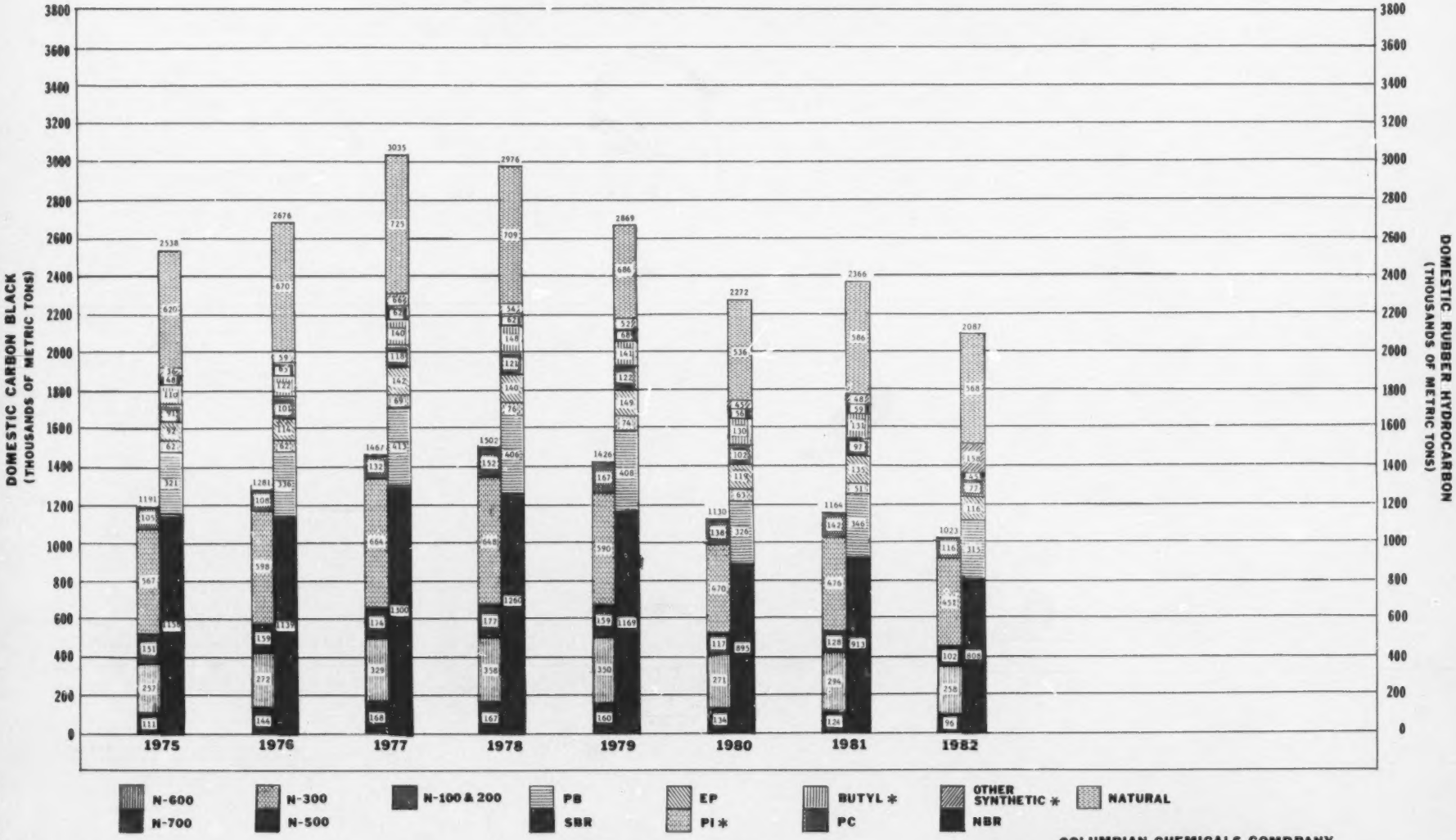


U.S.A. DRY RUBBER HYDROCARBON & CARBON BLACK CONSUMPTION



* As of 1982, Other Synthetic includes PI & Butyl.

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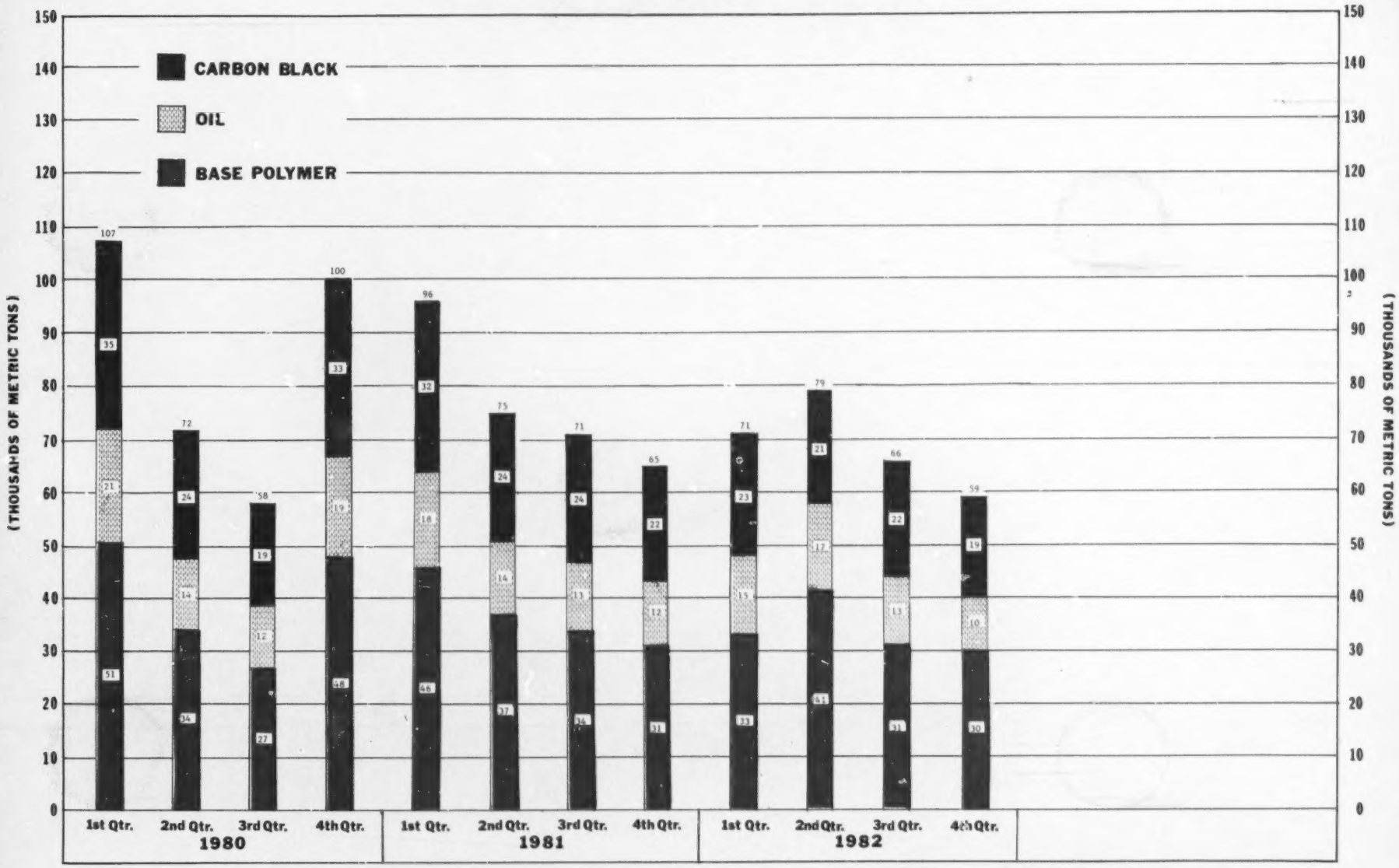
SBR BLACK RUBBER PRODUCTION



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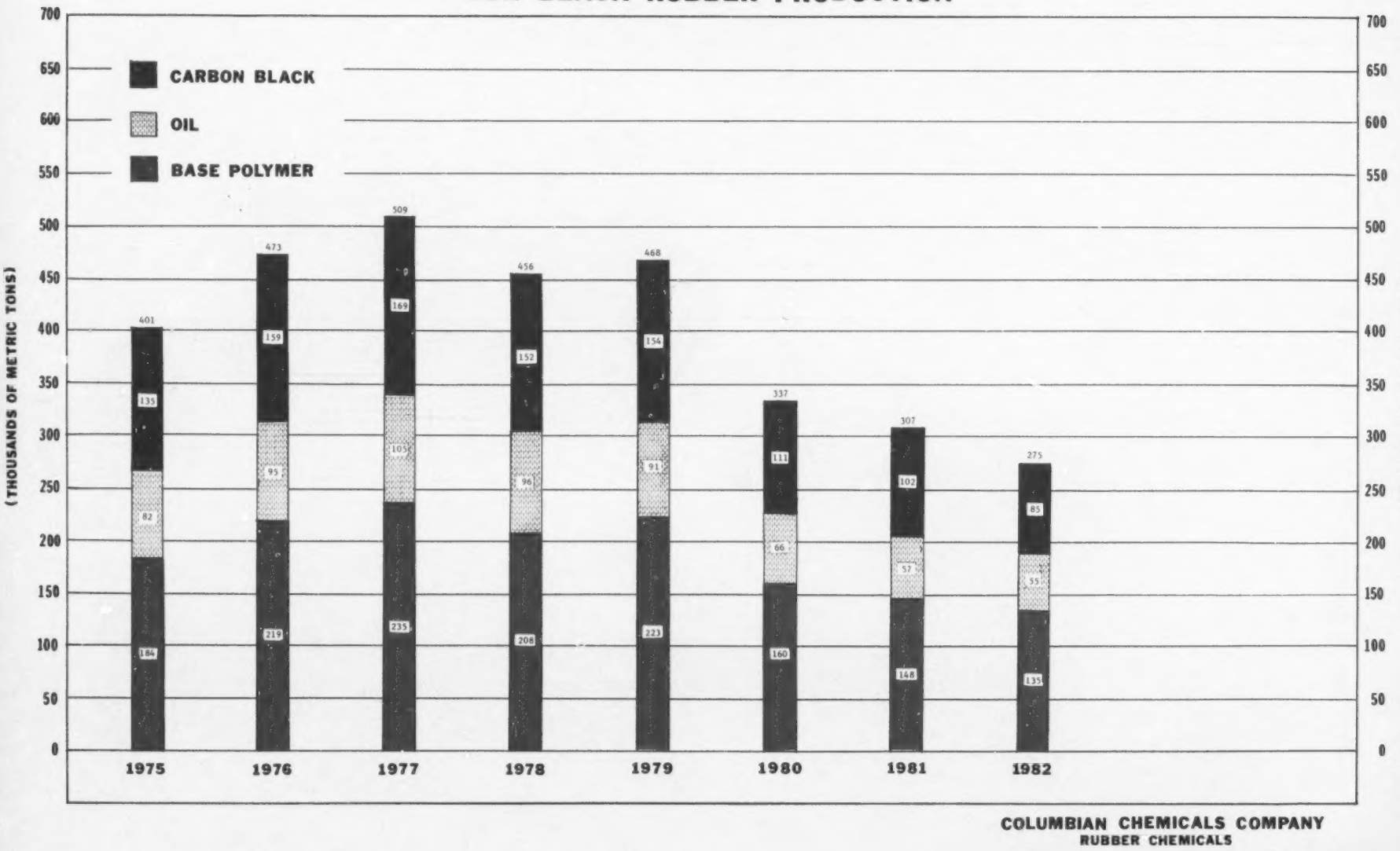

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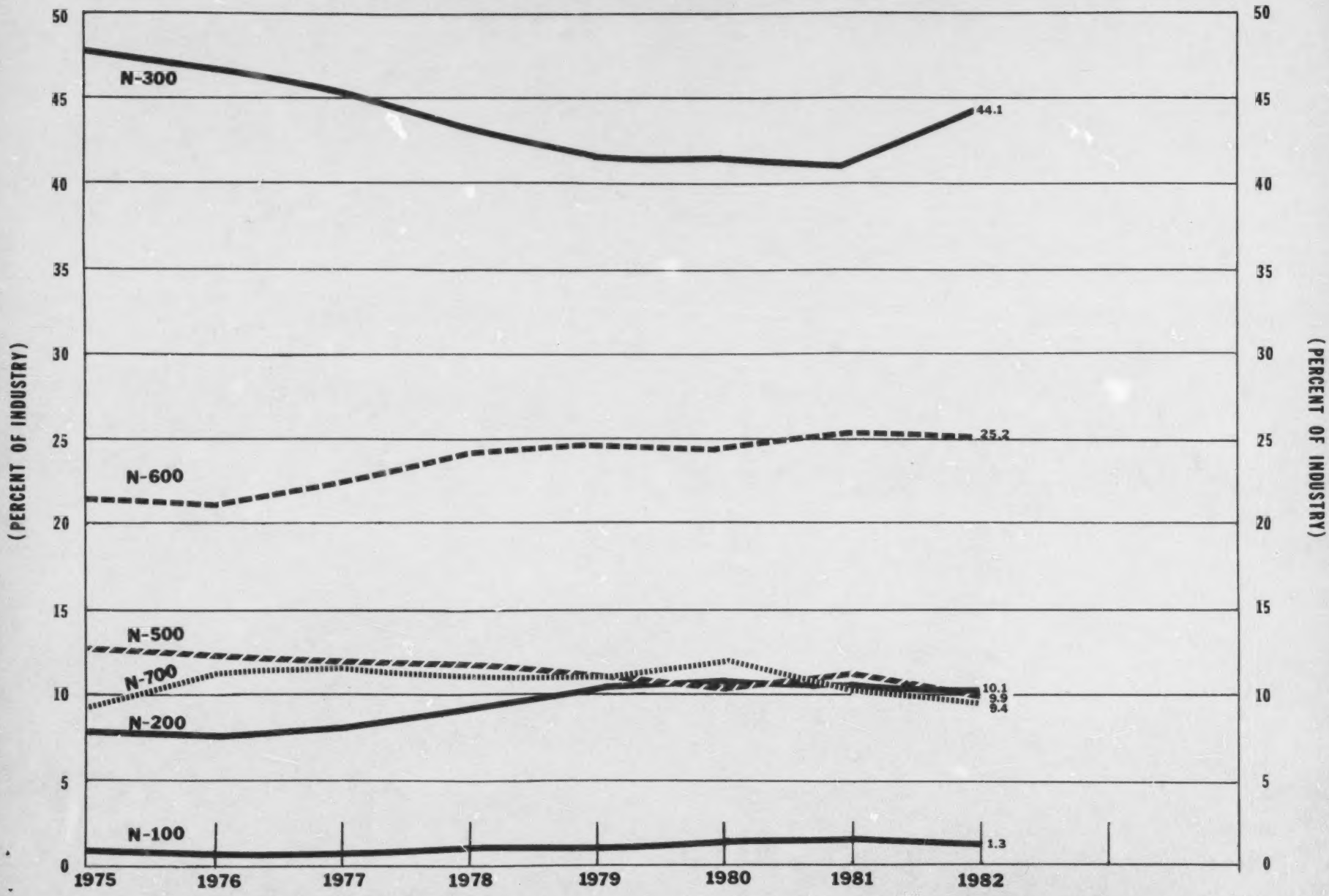
TRENDS IN U.S.A. FURNACE CARBON USAGE



COLUMBIAN CHEMICALS COMPANY
RUBBER CHEMICALS

B2320-1

Columbian Chemicals Company

July 22, 1983

Attached are charts and tables covering U.S.A. carbon black and dry rubber hydrocarbon consumption during the first quarter of 1983.

FURNACE BLACK

Although improved over the dismal fourth quarter of 1982, both furnace production of 270 thousand metric tons and shipments of 279 MMT decreased 4% and 2% respectively from the year-ago level and both represented the lowest in any first quarter since 1975 and 1969 respectively. Demand for all grades was down from the year earlier period, except N-100 (+23%), N-700 (+4%) and N-300 (1%).

Plant inventory decreased 10% during the quarter, from 99 to 89 MMT, a four-week supply.

DRY RUBBER HYDROCARBONS
(Excluding Reclaim)

Parallelling carbon black industry, U.S.A. dry rubber hydrocarbon consumption represented the lowest first quarter since 1967. Totaling 555 MMT, it was 11% below the year-ago level. Except Polychloroprene (+12%) and EPDM (+4%), all polymers were off, varying from 2% in Natural Rubber to 7% in SBR and Polybutadiene, 11% in other synthetic rubber and 12% in Nitrile.

The synthetic ratio reverted from 73.1% the year earlier to 72.4% and the carbon-rubber ratio rose from 47.3 to 49.4 parts per hundred rubber.

SBR black rubber production during the quarter decreased 7% from the 1982 period to 66 MMT, with net polymer, carbon black and oil off 4%, 6% and 13% in that order. The oil loading decreased from 44.4% a year ago to 40.2% and the net rubber used in black rubber, from 21.7% to 21.5% of the dry SBR output.

Very truly yours,

Edward I. Bosworth

Edward I. Bosworth
Manager, Marketing

EIB:gs

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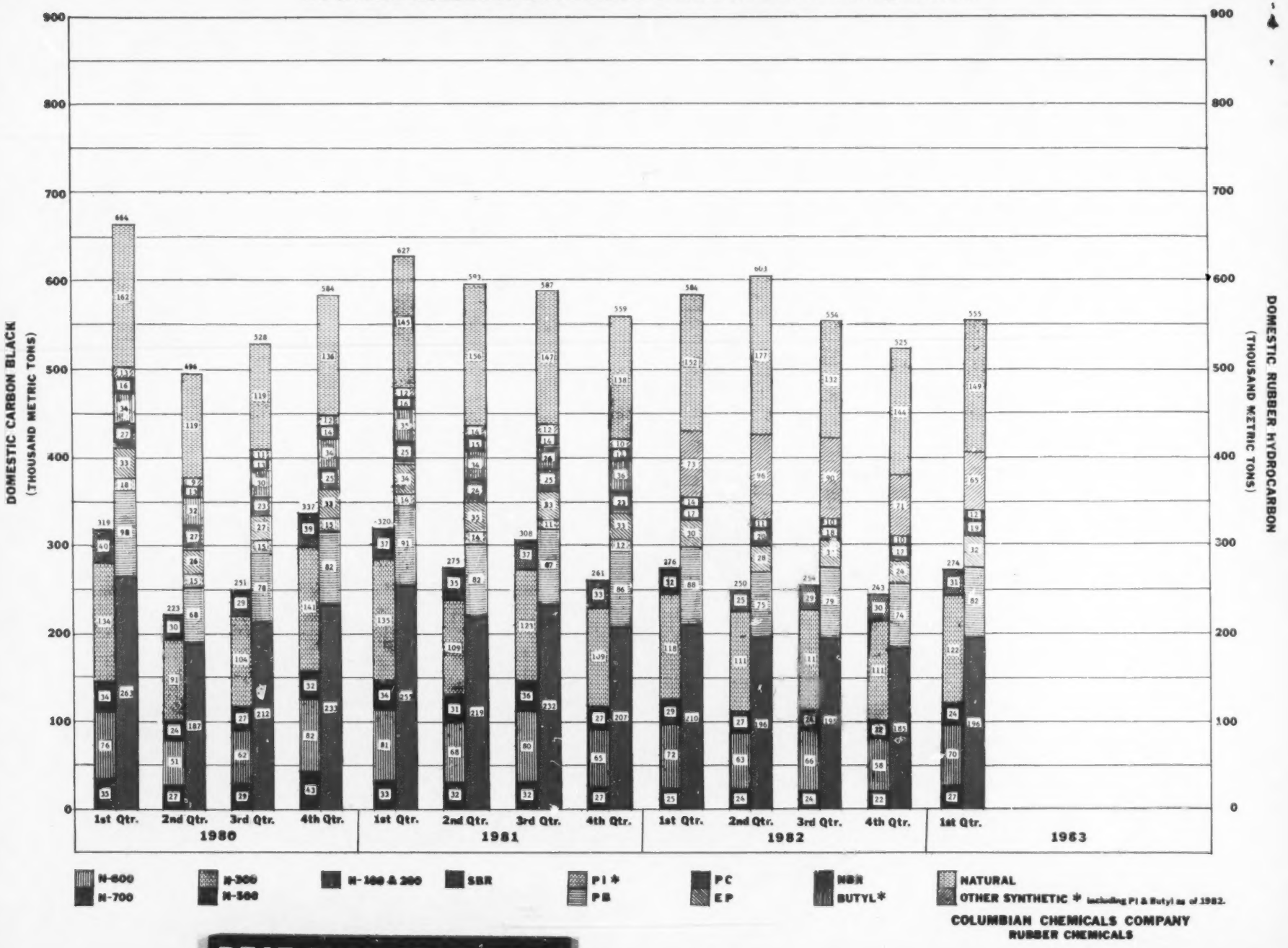
I. CARBON BLACK INDUSTRY IN THE U.S.A.
(Metric Tons)

		1st Qtr. 1983	Percentage Change from 4th Qtr. '82	Percentage Change from 1st Qtr. '82
N-100 (SAF)	Prod.	5,256	+29.1%	+23.4%
	Ship.	5,251	+32.9%	+22.6%
N-200 (ISAF)	Prod.	26,403	- 7.9%	- 9.7%
	Ship.	28,548	- 0.6%	- 6.1%
N-300 (HAF)	Prod.	123,181	+ 8.6%	+ 4.3%
	Ship.	122,920	+ 8.8%	+ 1.3%
N-500 (FEF)	Prod.	21,698	-13.3%	-25.8%
	Ship.	24,583	+ 8.6%	-15.3%
N-600 (GPF)	Prod.	68,634	+10.2%	- 5.0%
	Ship.	70,555	+21.4%	- 3.6%
N-700 (SRF)	Prod.	24,375	- 3.9%	- 7.5%
	Ship.	27,611	+26.7%	+ 4.2%
Total	Prod.	269,547	+ 4.1%	- 3.6%
	Ship.	279,468	+12.6%	- 1.8%
Domestic Shipments (Included Above)		274,288	+13.1%	- 0.7%
Domestic Share		98.1%		

II. SBR BLACK RUBBER PRODUCTION
(Metric Tons)

	1st Qtr. 1983	Percentage Change from 4th Qtr. '82	Percentage Change from 1st Qtr. '82
Net Polymer	31,673	+ 6.3%	- 4.2%
Oil	12,722	+20.7%	-13.3%
Oil % of Net Polymer	40.2%		
Net Rubber	44,395	+10.1%	- 7.0%
Net Rubber % of Dry SBR	21.5%		
Carbon Black	21,691	+17.2%	- 6.3%
Total SBR Black Rubber	66,086	+12.3%	- 6.9%



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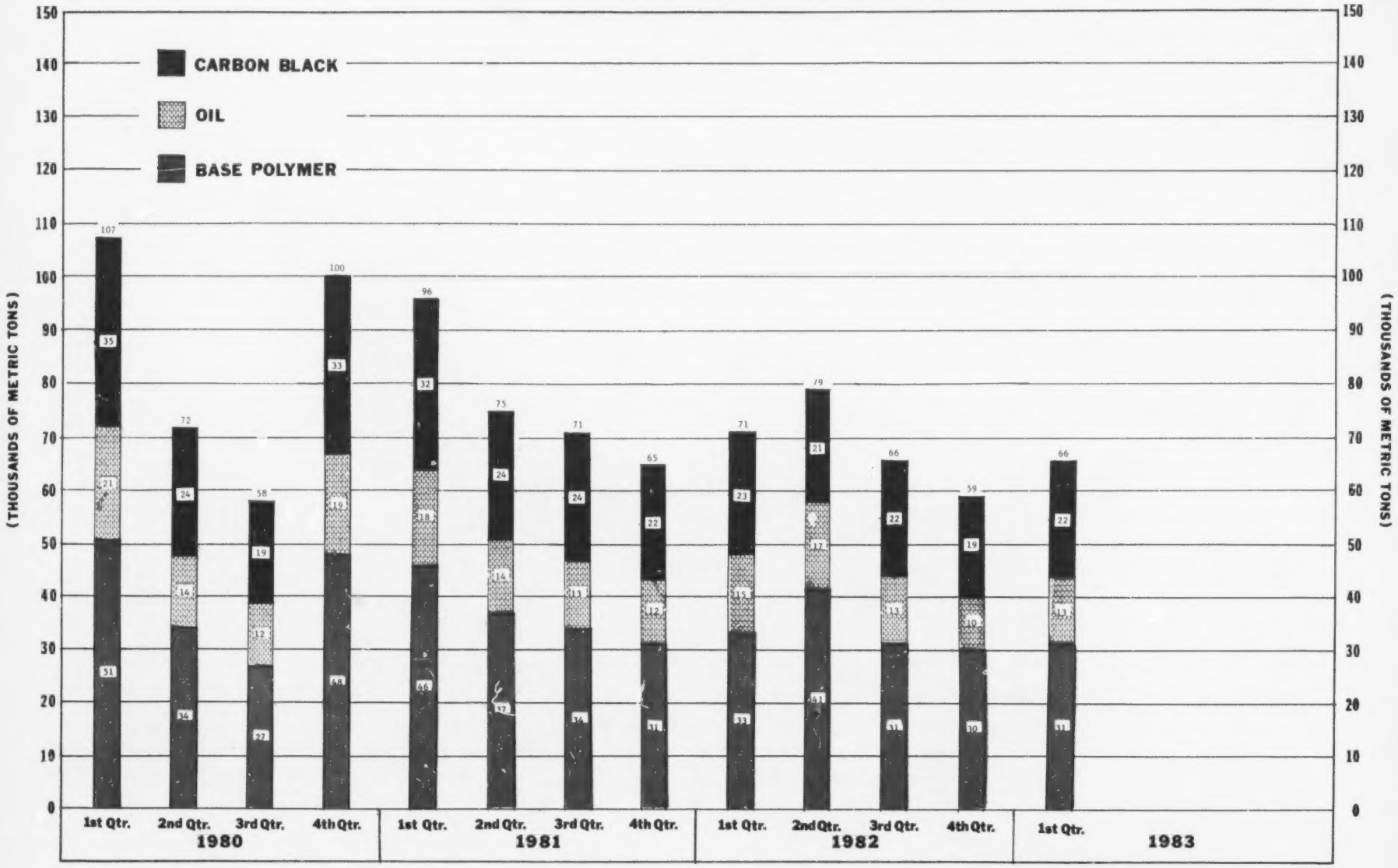
SBR BLACK RUBBER PRODUCTION



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